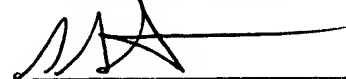




PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

I hereby certify that this correspondence is being submitted to the United States Patent and Trademark Office on 12/23/05

  
Signature

Appl No. : 10/673,828  
Applicant : Gregory Bates, et al.  
Filed : September 29, 2003  
Title : LASER WELD MONITOR

Confirmation No. 2536

TC/A.U. : 1725  
Examiner : Maria Alexandra Elve

Docket No. : 51210/SAH/U56

Customer No. : 23363

## DECLARATION OF GREGORY BATES UNDER 37 CFR § 1.132

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Post Office Box 7068  
Pasadena, CA 91109-7068  
December 23, 2005

Commissioner:

I, Gregory Bates, declare and state as follows:

1. I am a joint inventor with inventor Girish Kelkar on U.S. Patent Application No. 10/673,828 filed on September 29, 2003, which is a continuation of U.S. Patent Application No. 10/210,009 filed on July 31, 2002 and issued as U.S. Patent No. 6,670,574 on December 30, 2003.

2. I am an engineering manager of the Benchmark group at Miyachi Unitek Corporation, and have over 15 years of experience in the laser industry. As such, I am familiar with laser operation principles, and am very familiar with different types lasers in use today, especially in the areas of laser welding and cutting.

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Reply to Office action of July 26, 2005

3. Different types of lasers include continuous wave (CW) lasers and pulsed lasers. As their respective names indicate, a CW laser generates a single continuous beam of laser output while a pulsed laser generates laser pulses as its output. Laser pulses are generated by the laser beam being temporarily off followed by an on state in a repetitive fashion. In view of these different types of lasers, the formation of a pulse in the operation of a laser is not inherent in its very nature.

4. The temporal behavior of lasers is clearly split into two groups, continuous and pulsed. Please refer to page 11 of LIA Handbook of Laser Materials Processing, which is being submitted in an Information Disclosure Statement (IDS) herewith.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Executed this 23rd day of December.

By: 

Gregory Bates

JEJ PAS658933.1--12/23/05 10:56 AM